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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,543	03/01/2004	Thomas Cavanak	100-6403R	9687

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CORPORATE INTELLECTUAL PROPERTY
ONE HEALTH PLAZA 430/2
EAST HANOVER, NJ 07936-1080

EXAMINER	
RUSSEL, JEFFREY E	

ART UNIT	PAPER NUMBER
1654	

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/790,543	CAVANAK ET AL.	
	Examiner	Art Unit	
	Jeffrey E. Russel	1654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 07/481,082.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The disclosure is objected to because of the following informalities: The status of parent application 10/234,273 should be updated in the claim for priority supplied by the preliminary amendment. At page 1, the second line of text after the claim for priority, "a" should be changed to "as". At page 1, the fifth line after the claim for priority, "undecapeptides" is misspelled. At page 6, line 1, "particular" is misspelled. at page 7, line 30, "from" should be deleted. At page 8, line 6, "the" should be inserted after "as" and "anyone" should be changed to "any one". At page 10, lines 24-25, "a conjunction" should be deleted. At page 11, line 22, "para-" is incomplete. At page 12, line 20, "the" (first occurrence) should be capitalized. At page 13, line 30, either the parentheses should be removed from "generally minor amounts" or else the end parenthesis should be moved to after "of". At page 17, line 20, "polyoxyethylated" is misspelled. At page 19, line 17, "polyol" is misspelled. At page 26, line 3, "Dioctylsuccinate" is misspelled. At page 30, line 20, "asymmetric" is misspelled. At page 42, line 13, "composition" should be changed to "compositions". At page 45, line 23, "-GT" is incomplete. The specification would benefit from further revision of grammatical and spelling errors. Appropriate correction is required.

2. Claims 10-13, 15, 16, 17, 21, 23, 25, 26, and 30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 10-13, 15, and 16, the "preferably..." clauses are indefinite because it is not clear if the scopes of the claims are to be limited to the preferred embodiments or not. It is suggested that the "preferably..." clauses could be made the subject matter of further dependent claims. Similarly, the "in particular...", the "such as...", and the "for example..." clauses in claims 25 and 26 are indefinite. Claims 21, 23,

and 30 are indefinite because they refer to a component (d), but none of the claims upon which they depend mention a component (d). It may be that their dependencies need correction.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 2-7, 9, 10, 18, 20, 22, and 23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,468,968. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '968 patent anticipate the instant claims.

5. Claims 2-7, 9, 10, 18, 20, 22, and 23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,306,825. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '825 patent anticipate the instant claims.

6. Claims 1-8, 10, 12, 17, 18, 20, 22, and 23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,262,022. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '022 patent anticipate the instant claims.

7. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-64 of U.S. Patent No. 5,916,589. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '589 patent anticipate the instant claim. Note that the '589 patent claims cyclosporin-containing compositions which comprise a fatty acid triglyceride (see, e.g., claims 8 and 20) and a glycerol fatty acid partial ester, i.e. a monoglyceride such as glycerol monooleate (see, e.g., claims 10 and 22).

8. Claim 2 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 5,652,212. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '212 patent anticipate the instant claim.

9. Claims 1-20, 22, 23, and 27-37 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 5,639,724. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '724 patent anticipate instant claims 1-14, 16-20, 22, 23, 27, 30, 32, 33, 35, and 36. With respect to instant claims 15, 28, 29, 31, 34, and 37, while the '724 patent does not claim the concentrations and proportions recited in the instant claims, it would have been obvious to one of ordinary skill in the art to determine all operable and optimal concentrations and proportions for the claimed compositions of the '724 patent because concentration and proportion are art-recognized result-effective variables which are routinely determined and optimized in the pharmaceutical composition arts.

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

For the purposes of this invention, the level of ordinary skill in the art is deemed to be at least that level of skill demonstrated by the patents in the relevant art. Joy Technologies Inc. v. Quigg, 14 USPQ2d 1432 (DC DC 1990). One of ordinary skill in the art is held accountable not only for specific teachings of references, but also for inferences which those skilled in the art may reasonably be expected to draw. In re Hoeschele, 160 USPQ 809, 811 (CCPA 1969). In addition, one of ordinary skill in the art is motivated by economics to depart from the prior art to

reduce costs consistent with desired product properties. In re Clinton, 188 USPQ 365, 367 (CCPA 1976); In re Thompson, 192 USPQ 275, 277 (CCPA 1976).

11. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,916,589. The '589 patent teaches, in Examples 1.6 - 1.8, cyclosporin-containing compositions comprising Miglyol 812 (which comprises fatty acid triglycerides) and glycerol monooleate (which is a glycerol fatty acid partial ester).

12. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Cavanak (U.S. Patent No. 4,388,307). Cavanak teaches cyclosporin-containing compositions comprising saturated fatty acid triglycerides and mono- or di-glycerides of fatty acids (i.e., glycerol fatty acid partial esters). See, e.g., the Abstract and column 4, lines 3-39.

13. Claims 1-8, 10-14, 17-24, 26-30, and 32-37 are rejected under 35 U.S.C. 102(b) as being anticipated by the Belgian Patent '724 in view of Applicants' admission of the prior art at page 9, lines 26-30; page 15, lines 17-32; and page 19, lines 16-18 and 21-22, of the specification. The Belgian Patent '724 teaches cyclosporin compositions comprising Dihydrocyclosporin D (which corresponds to the second member of the Markush group in Applicants' claim 5) and a carrier medium comprising ethanol, "MAISINE®", and optionally "CREMOPHOR® RH 40" (an emulsifying agent formed by reacting hydrogenated castor oil with ethylene oxide) or "IMWITOR® 742" or "LABRAFIL® 2125" (a polyoxyethylated kernel oil). The compositions are to be administered orally in unit dosage form, optionally in combination with a chocolate flavour-masking component. See Examples 1 and 2. Example 2 is substantially free of ethanol. Applicants admit at page 9, lines 26-30, and page 15, lines 17-32, of the specification that "MAISINE®" is the tradename of a trans-esterification product of corn oil with glycerol,

comprising triglycerides, diglycerides, monoglycerides, and free glycerol in the ratios claimed by Applicants. Applicants admit at page 19, lines 16-18, of the specification that "LABRAFIL®" is a trans-esterification product of a natural vegetable oil and a polyalkylene polyol. Applicants admit at page 19, lines 21-22, of the specification that "IMWITOR®" is an esterification product of caprylic and caproic acid.

14. Claims 28 and 31 are rejected under 35 U.S.C. 103(a) as being obvious over the Belgian Patent '724 in view of Applicants' admission of the prior art at page 9, lines 26-30; page 15, lines 17-32; and page 19, lines 16-18 and 21-22, of the specification. Application of the Belgian Patent '724 and Applicant's admission is the same as in the above rejection of claims 1-8, 10-14, 17-24, 26-30, and 32-37. In Example 1 of the Belgian Patent '724, the ratio of Dihydrocyclosporin D to "CREMOPHOR® RH 40" is not 1:at least 1. It would have been obvious to one of ordinary skill in the art at the time Applicants' invention was made to determine all operable and optimum proportions of Dihydrocyclosporin D and "CREMOPHOR® RH 40" for use in the invention of the Belgian Patent '724 because the disclosure of the Belgian Patent '724 is not limited to any particular proportions of components in its pharmaceutical compositions and because it is routine in the art to determine all operable and optimal proportions of components in pharmaceutical compositions.

15. Claims 5 and 28 are rejected under 35 U.S.C. 103(a) as being obvious over the Belgian Patent '724 in view of Applicants' admission of the prior art at page 9, lines 26-30; page 15, lines 17-32; and page 19, lines 16-18 and 21-22, of the specification as applied against claims 1-8, 10-14, 17-24, 26-30, and 32-37 above, and further in view of Cavanak (U.S. Patent No. 4,388,307). The Belgian Patent '724 discloses pharmaceutical compositions suitable for oral administration

of Dihydrocyclosporin D, but does not teach orally administering Cyclosporin A. Cavanak discloses the desirability of orally administering Cyclosporin A (see, e.g., column 3, lines 47-48, and column 5, lines 1-15). It would have been obvious to one of ordinary skill in the art at the time Applicants' invention was made to formulate the Cyclosporin A of Cavanak with the pharmaceutically acceptable carriers of the Belgian Patent '742 because Cavanak discloses the desirability of orally administering Cyclosporin A, the Belgian Patent '724 discloses pharmaceutically acceptable carriers which are useful for orally administering analogous active agents, and because it is routine in the art to formulate known active agents with different known pharmaceutically acceptable carriers.

16. Claim 25 is rejected under 35 U.S.C. 103(a) as being obvious over the Belgian Patent '724 in view of Applicants' admission of the prior art at page 9, lines 26-30; page 15, lines 17-32; and page 19, lines 16-18 and 21-22, of the specification as applied against claims 1-8, 10-14, 17-24, 26-30, and 32-37 above, and further in view of Yamato et al. The Belgian Patent '724 does not teach a base material which is cacao butter for the gelatin capsule form. Yamato et al disclose that cacao butter is a standard inert diluent for solid unit dosage forms, including those coated with gelatin (see column 19, lines 18-29). It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to use the cacao butter of Yamato et al as a diluent for the cyclosporin in gelatin capsule form of the Belgian Patent '724 because it is routine in the art to formulate pharmaceutically active agents with different inert ingredients known in the pharmaceutical arts.

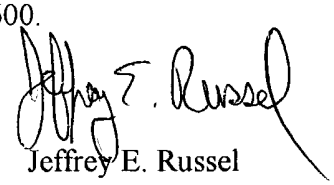
17. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by the Chemical Abstract 92:64765k. The Chemical Abstract 92:64765k teaches a pharmaceutical composition

comprising Cyclosporin A, an ester of a triglyceride with a polyalkylene glycol, e.g., "LABRAFIL M 1944", a fatty acid triglyceride, and a mono- or di-glyceride.

18. Applicants are requested to review claim 21 in order to determine whether "capric" might have been intended instead of "caproic". Compare page 18, lines 5-8, and page 19, lines 21-22, of the specification.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey E. Russel at telephone number (571) 272-0969. The examiner can normally be reached on Monday-Thursday from 8:30 A.M. to 6:00 P.M. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Bruce Campell can be reached at (571) 272-0974. The fax number for formal communications to be entered into the record is (703) 872-9306; for informal communications such as proposed amendments, the fax number (571) 273-0969 can be used. The telephone number for the Technology Center 1600 receptionist is (571) 272-1600.



Jeffrey E. Russel

Primary Patent Examiner

Art Unit 1654

JRussel

August 18, 2004